CLAIMS

1. (Currently Amended) Deoxynojirimycin analogue, or a pharmaceutically acceptable salt thereof, having the general structure (I)

wherein R_1 - R_5 each independently comprise H or $(CH_2)_nCH_3$ or X; \underline{n} is 0-9

R₆ comprises H, CH₂OH or CH₂OX;

M-m is 0 or 1;

N is 0-9;

a, b, c, d, e are chiral centra centers having an R or S configuration;

and X comprises a large hydrophobic moiety and a spacer, whereby the hydrophobic moiety is linked through the spacer to the nitrogen atom or carbon atom concerned, and wherein the large hydrophobic moiety is derived from a polycyclic alcohol containing three or more rings each sharing two or more carbon atoms with another one of the other rings and is capable of inserting in lipid bilayers.

- 2. (original) Deoxynojirimycin analogue, or a pharmaceutically acceptable salt thereof, according to claim 1, wherein the large hydrophobic moiety is linked to said nitrogen atom of the deoxynojirimycin by means of a spacer comprising an alkoxy polyalkylene or polyalkylene chain of from 3 to 8 carbon atoms.
- 3. (previously presented) Deoxynojirimycin analogue, or a pharmaceutically acceptable salt

thereof, according to claim 1, wherein the large hydrophobic moiety is derived from a compound selected from the group consisting of adamantanemethanol, cholesterol, β -cholestanol, adamantanol and 9-hydroxyphenanthrene.

- 4. (previously presented) Deoxynojirimycin analogue, or a pharmaceutically acceptable salt thereof, according to claim 1, having the ido-configuration.
- 5. (original) Deoxynojirimycin analogue comprising ido-N-(5-adamantane-1-yl-methoxy pentyl)deoxynojirimycin, or a pharmaceutically acceptable salt thereof.
- 6. (Currently Amended) A method of treating a disease or condition involving increased levels of glucosylceramide and glucosphingolipids comprising administering an effective amount of a Deoxynojirimycin analogue according to claim 1 for use in the treatment of a disease involving increased levels of glucosylceramide and glucosphingolipids to a person in need thereof.
- 7. (Currently Amended) A method of treating a disease or condition involving increased levels of glucosylceramide glucosphingolipids and glucosidases comprising administering an effective amount of a Deoxynojirimycin analogue according to claim 1 for use in the treatment of a disease involving increased levels of glucosylceramide, glucosphingolipids and glucosidases to a person in need thereof.
- 8. (Currently Amended) Dexynojirimycin analogue according to The method of claim 6 for use in the treatment wherein the disease is of Gaucher disease.
- 9. (Currently Amended) <u>The method of Dexynojirimycin analogue according to claim 6 for use in the treatment of wherein the disease is an inflammatory disease.</u>
- 10. (Currently Amended) The method of Dexynojirimycin analogue according to claim 6 for use

in the treatment of wherein the condition is hyperpigmentation and/or an inflammatory skin conditions condition.

- 11. (Currently Amended) <u>The method of Dexynojirimyein analogue according to claim 6 for use in the treatment of wherein the disease is a fungal disease.</u>
- 12. (Currently Amended) The method of Dexynojirimycin analogue according to claim 6 for use in the treatment of wherein the condition is overweight and or obesity.
- 13. (Currently Amended) <u>The method of Dexynojirimyein analogue according to claim 6 for use in the treatment of wherein the disease is a lysosomal storage disorders.</u>
- 14. (Currently Amended) <u>The method of Dexynojirimycin analogue according to claim 6 for use in the treatment of wherein the condition is melanoma and or a other tumors.</u>
- 15. (Currently Amended) The method of Dexynojirimyein analogue according to claim 6 for use in the treatment of awherein the disease is a microbacterial infection.
- 16. (Currently Amended) <u>The method of Dexynojirimycin analogue according to claim 7 for use in the treatment of wherein the condition is insulin resistance.</u>
- 17. (Currently Amended) Pharmaceutical composition comprising a deoxynojirimycon deoxynojirimycin analogue, or pharmaceutically acceptable salt thereof, according to claim 1 and a pharmaceutically acceptable carrier.
- 18. (Currently Amended) Method of treatment of an individual suffering from a disease selected from the group consisting of insulin resistance, <u>Gauger Gaucher</u> disease, inflammatory diseases, hyperpigmentation and/or inflammatory skin conditions, overweight and obesity, lysosomal

Amendment and Response U.S.S.N. 10/595,589 Page 5 / 7

storage disorders, fungal diseases, melanoma and other tumors, and microbacterial infections, comprising administrating to said individual an effective amount of the pharmaceutical composition according to claim 17.